

## **REMARKS**

Claims 1-31 remain in the application. The Examiner has rejected under 35 U.S.C. 102(b) claims 1-5, 7-12 and 14 - 16 as anticipated by Maio, claims 1, 7- 9 and 14 - 16 as anticipated under Collins, claims 17-19 as anticipated by Greenwood and claims 24 and 26 - 31 as anticipated under Yamaguchi. The Examiner has rejected under 35 U.S.C. 103(a) claim 13 over Maio, claim 6 over Collins in view of Gruttemeler, and claims 20 - 23 over Greenwood in view of Gruttemeler.

Please reconsider the application in view of the following remarks.

## **RESPONSE TO CLAIM REJECTIONS UNDER 35 U.S.C. §102**

### **Rejection of Claims 1-5, 7-12 and 14-16 (Maio)**

In the office action, claims 1-5, 7-12 and 14-16 were rejected under 35 U.S.C. 102 (b) as being anticipated by Maio, U.S. Patent No. 4,767,117. Maio neither expressly or inherently contains, within its four corners, every element of the claims in question. Specifically, Maio does not disclose a polo training apparatus having either a movable ball-receiving surface or a moving conveyor belt positioned on each side of the dummy horse. Nor does Maio teach that either the movable ball-receiving surface or the moving conveyor belt is the ball receiving surface.

### **MAIO TEACHES AWAY FROM APPLICANT'S INVENTION**

Claim 1 of the present invention, as amended, from which claims all claims now depend, comprises the following elements:

1. a dummy horse;
2. at least one movable ball-receiving surface or endless (moving) conveyor belt having an upper run (*see Application, ppg. 0026*); and,

3. two or more inclined surfaces adjacent the conveyor belt, the inclined surfaces angled to rise above the upper run of the movable ball-receiving surface or conveyor belt so as to return a hit ball to the conveyor belt.

Maio does not disclose nor claim these elements of the present invention. The Examiner states: Maio discloses an amusement ride and game comprising a dummy horse (25) and at least one movable ball-receiving surface (the top surface of 24) located adjacent to and below the dummy horse (25); the game is a combination of an amusement ride and a polo game utilizing a ball (18) and a mallet (19); and two or more inclined surfaces (the two inclined sides of shield 22).

Regarding Claim 1, Maio discloses

1. a rotating carousel 24,
2. one non-movable or stationary ramp 11, and
3. a tee on the non-movable ramp for providing a ball.

Maio's ramp 11 serves the same purpose as Applicant's movable ball-receiving surface in that they both are the point of action for hitting the ball. However, each have a different structure (Applicant's movable ball-receiving surface or conveyor belt is a continuous band driven by a motor *see Application, ppg. 0035.*) The movable ball receiving surface is designed for continuous motion whereas Maio's ramp is stationary with no moving parts. Consequently, Applicant's polo training apparatus function differently from Maio's amusement ride.

Maio also teaches away from Applicant's device in that Maio's horses as attached to the carousel 24 have momentum and move forward albeit in a circle. Maio's ramp 11 is stationary. Applicant's dummy horse is supported on a fixed frame, *see ppg 0029*, so that it may have reciprocal motion, but it always remains "in place" or stationary, i.e. it never moves forward in a linear direction from point A to point B. Contrary to Maio stationary ramp, Applicant's movable ball-receiving surface or conveyor belt has forward motion to simulate the playing ground moving past the player.

Maio's device also differs from Applicant's invention in that, at the elevated end 13 of ramp 11, there is located a target 14 including a series of concentric rings 15 forming annular channels 16 therebetween. Col. 2, lines 26 – 31. The "vehicle means associated with ramp 11 for transporting a plurality of human players 20 such that each player is periodically brought into proximity with tee 23. In the preferred embodiment, such a vehicle is a carousel 24. Carousel 24 is adapted in conventional fashion to rotate in a counterclockwise direction (as seen from above) and is provided with a plurality of seating locations for carrying the players. Preferably, the seating locations are configured as horses 25. Horses 25 can be adapted to move up and down or remain vertically stationary." Col. 2, lines 49 – 58.

Maio does not disclose a movable ball-receiving surface or conveyor belt arrangement nor does he disclose or teach two or more inclined surfaces adjacent to a conveyor belt to rise above the upper run of the conveyor belt so as to return a hit ball to the conveyor belt. Maio does not disclose a moveable ball receiving surface at all, but only a stationary ramp, on whose surface the ball rolls upwards to a target after being struck. Although the horses of Maio are moveable in an up and down fashion, these horses are primarily a seating means, not a fully simulated horse riding experience.

The Examiner further states: "With regards to the limitation a ball-receiving surface, the surface (the upper surface of 24) of Maio can receive a ball. " In Maio, reference number 24 is the carousel, not a ball-receiving surface.

Applicant's claim 1 does not read upon Maio. Claims 2-24 and 26-31 depend on claim 1 and therefore, with their new elements in addition to the elements of Applicant's claim 1, are not anticipated by Maio.

REJECTION OF CLAIMS 2-5, 7-12 AND 14-16 (MAIO)

Regarding claims 2 and 3, again reference number 24 is the carousel, top surface of 24 (the carousel) is not a ball-receiving surface; the ball-receiving surface in Maio is the stationary ramp.

Neither is the top surface of 24 (the carousel) displaceable in reference to the horses. The horses on the carousel move up and down in reference to the carousel top, but the carousel itself is not separately displaceable from the movement of the horses. The “operation of the motor M not only induces a simulated galloping motion in the horse but also causes the conveyor belts 22, 24 to move.” See Application, ppg 0031

Regarding claims 4 and 5, the Examiner states Maio shows a plurality of ball receiving surfaces (the surface on either side of the horse and also ramp 11); and more specifically two ball-receiving surfaces, one located on each side of the dummy horse. The only surface a ball in Maio contacts is the top of the ramp 13: a ball is struck by a mallet 19 held by a player 20 and thereby directed up ramp 13 toward target 14 with the object being to cause the ball to land within the centermost ring of rings 15 and pass through the aperture therein for maximum score. Col. 2, lines 33 – 38.

Regarding claims 7, 8 and 9, the Examiner states Maio shows a dummy horse displaceable, (including rotational movement of the ball receiving surface which the dummy horse is attached to) and the dummy horse movable in a reciprocating motion (including the up and down movement of the dummy horse). In fact, Carousel 24 is adapted in conventional fashion to rotate in a counterclockwise direction (as seen from above) and is provided with a plurality of seating locations for carrying the players. Preferably, the seating locations are configured as horses 25. Horses 25 can be adapted to move up and down or remain vertically stationary. Col. 2, lines 51 – 58. Further, the horses in Maio move in a closed circle, which would be unrealistic for a polo horse. The most important distinguishing feature between Maio and Applicant’s invention is that the ball never is on the surface of the carousel, the ball’s only action takes place upon the stationary the ramp.

Regarding claims 10 – 12, the Examiner states Maio shows the speed of the dummy horse is a function of the speed of the ball-receiving surface, are proportional and driven by the same means. The ramp of Maio, on which a ball is hit toward a target, is stationary. Only the carousel of Maio rotates. The carousel never receives the ball during the action of the game.

Regarding claim 14, the Examiner states Maio shows two or more inclined surfaces (the two sides of shield 22) adjacent to the ball-receiving surface (24) are at oblique angles to the ball-receiving surface (the two sides are slanted, since ramp 11 is not uniformly wide). The only mention in Maio to the shield is: A shield 22 is provided to retain misdirected shots. Col. 2, line 41 –42. Further, at most Maio has only one inclined surface, the ramp itself which is stationary.

Regarding Claims 15 and 16, the Examiner states the vertical supports of the dummy horses form a peripheral enclosure and that the enclosure comprises a cage or net. There is no reference in Maio to any such feature. According to the drawings, the vertical supports in Maio hold up an awning over the carousel or the horses; they do not comprise a cage or a net. Applicant respectfully requests that Examiner provides the cite in Maio where vertical supports of the dummy horses form a peripheral enclosure and that the enclosure comprises a cage or net can be found.

Claims 1-3, 6-12 and 14 are not anticipated by Maio. Maio does not disclose a polo training apparatus, but an amusement park ride and game. Maio does not have:

1. a movable ball receiving surface or conveyor belt to return hit polo balls, the Maio ramp is stationary;
2. two or more inclined surfaces adjacent the ball receiving surface, the stationary Maio ramp itself is the ball receiving surface.
3. or a dummy horse that realistically simulates a polo pony, Maio expressly describes the device as an amusement park ride and game.

Therefore, Examiner's rejection of claims 1-3, 6-12 and 14 under 35 USC 102 (b) is not appropriate because Maio, neither expressly or inherently discloses every element of the claims in question. Maio teaches away from Applicant's invention. The present invention as defined in claims 1-3, 6-12 and 14 is patentably distinguished over Maio. Applicant respectfully requests the Examiner to withdraw his rejection of claims 1-3, 6-12 and 14 under 35 U.S.C. §102(b).

**Rejection of Claims 1, 7-9 and 14-16 (Collins)**

The Examiner rejected claims 7-9 and 14-16 under 35 U.S.C. §102 (b) as being anticipated by Collins (GB 2,233,913A). Applicant respectfully traverses this objection. Applicant requests that the Examiner reconsider and withdraw the above rejection of the claims in view of the following:

**COLLINS DOES NOT TEACH OR SUGGEST ALL OF THE ELEMENTS IN APPLICANT'S POLO TRAINING APPARATUS**

Applicant respectfully submits that nothing in the art of record teaches or suggests the present invention.

Claim 1 of the present invention, as amended, from which claims all claims now depend, comprises the following elements:

1. a dummy horse;
2. at least one movable ball-receiving surface or endless (moving) conveyor belt having an upper run (*see Application, ppg. 0026*); and,
3. two or more inclined surfaces adjacent the movable ball receiving surface or conveyor belt, the inclined surfaces angled to rise above the upper run of the conveyor belt so as to return a hit ball to the conveyor belt.

The Examiner states that, regarding claims 1: Collins shows a polo training apparatus comprising a dummy horse (13), at least one ball-receiving surface (the ground

surface) located adjacent to and below the dummy horse (13); two or more inclined surfaces (the area covered by surface area 10 which is positioned on either side of column 24). The elements attributed to Collins by the Examiner are not correct.

Collins teaches a workout horse comprising:

1. a stationary base frame;
2. a body portion
3. an interconnecting drive means for driving the body portion relative to the base; the drive means continuously reciprocating the body portion.

Collins does not teach or suggest at least movable ball-receiving surface or a movable conveyor belt for returning the ball to play position. Contrary to Applicant's invention, a ball used with Collins's workout horse merely rolls back down as pulled by gravity rather than being brought to a hitting position along side the polo player as taught by Applicant.

The workout horse of Collins may be provided in combination with a known dish shaped surface on which, e.g. at its centre, the workout horse is stood or preferably fixed. The rider then sits on the horse for practicing hitting polo balls. The contour of the surface is designed to retain the balls within the confines of the surface and to return them towards the horse. Page 2, lines 17 – 24. The practice surface area 10 is of conventional design and in this embodiment is formed of reinforced glass fibre. The surface has an upstanding peripheral rim 11 with an inwardly projecting lip 12 to retain the polo balls on the surface area, and also slopes generally towards its centre. Page 3, lines 20 – 26. In this invention, the ball-receiving surface (the practice surface area) is a dish shaped area in which the horse is centered. This is in contrast to the endless conveyor belt of the present invention, one or more which may be present adjacent to the dummy horse. Further, the Collins patent recites a dish shaped surface, not two or more inclined surfaces for ball return. Collins does not anticipate Applicant's invention.

The Examiner further states: “the dummy horse is movable with respect to the ball receiving surface. It should be noted that the ball receiving surface (the ground) is located on both sides and below the dummy horse and it is displaceable with respect to the moving horse and the rider.” In Collins, the workout horse 13 is positioned at the centre of the practice surface, which is the dish shaped surface. The practice surface does not move, the drive means in Collins is only connected to the body portion and base frame, not the movable ball-receiving surface.

Claims 7 – 9 and 14-16 depend from claim 1 and have all of the elements of claim 1 along with one additional element. Collins does not anticipate or teach all of Applicant’s Claims 7 – 9 and 14-16.

Regarding claims 7 – 9, the Examiner states Collins additionally shows the dummy horse displaceable, movable in a reciprocating motion and movable to simulate the movements of a real polo horse during a game of polo. Although the Applicant’s dummy horse is movable in a reciprocating motion, claims 7 – 9 and 14-16 depend from claim 1 and have all of the elements of claim 1 along with one additional element. Collins does not anticipate or teach all of the elements in Applicant’s Claims 7 – 9.

Regarding claim 14, the Examiner claims Collins shows two or more movable surfaces (the area covered by surface area 10 which is positioned on either side of column 24) are at oblique angles to the ball receiving surface. There is no mention in Collins of two or more movable surfaces, or of oblique angles. Claims 14-16 depend from claim 1 and have all of the elements of claim 1 along with one additional element. Collins does not anticipate or teach all of the elements in Applicant’s Claims 14-16.

Regarding claim 15 and 16, Examiner states Collins shows the training apparatus comprises a peripheral enclosure (12), a net. In fact, 12 is part of the ball-receiving surface: The surface has an upstanding peripheral rim 11 with an inwardly projecting lip 12 to retain the polo balls on the surface area, and also slopes generally towards its centre. Page 3, Line 23-26. This lip is not an enclosure, nor does it comprise a net. If desired the rim could additionally have protective netting around its periphery.



Therefore, Examiner's rejection of claims 1, 7-9 and 14-16 under 35 U.S.C. 102 (b) is not appropriate because Collins, neither expressly or inherently discloses every element of the claims in question. The present invention as defined in claims 1, 7-9 and 14-16 is patentably distinguished over Collins. Applicant respectfully requests the Examiner to withdraw his rejection of claims 1, 7-9 and 14-16 under 35 U.S.C. 102(b).

**Rejection of Claims 17-19 (Greenwood)**

GREENWOOD DOES NOT HAVE EVERY ELEMENT OF THE CLAIMS IN QUESTION.

Claims 17-19 were rejected under 35 U.S.C. 102(b) as being anticipated by Greenwood (US Patent No. 5,429,515). Applicant respectfully traverses this objection. Applicant requests that the Examiner reconsider and withdraw the above rejection of the claims in view of the following:

Greenwood, neither expressly or inherently contains, within its four corners, every element of the claims in question. No where in Patent 5,429,515 are all of the elements as claimed by Applicant.

Claim 1 of the present invention, as amended, from which claims all claims now depend, comprises the following elements:

1. a dummy horse;
2. at least one movable ball-receiving surface or endless (moving) conveyor belt having an upper run (*see Application, ppg. 0026*); and,
3. two or more inclined surfaces adjacent the movable ball receiving surface or conveyor belt, the inclined surfaces angled to rise above the upper run of the conveyor belt so as to return a hit ball to the conveyor belt.

The '511 patent does not teach nor disclose at least one movable ball receiving surface or two or more inclined surfaces adjacent the movable ball receiving surface.

Applicant claims a dummy horse having a body portion 44 pivotally mounted on a frame, whereby the body portion 44 can pivot from side to side. The side to side pivoting of the body portion 44 of the dummy horse simulates more closely the movement of the rider and horse as the ball is hit. *see page 3, lines 2-3*. Applicant's Figures 2 and 3 clearly show that the body portion is labeled as 44 and the neck portion 46 is a different and distinguishable feature. In claims 17-19, Applicant is claiming a body portion that pivots.

The Examiner cites to the '515 patent in regards to claim 17: In use, a saddle is secured to the body portion of the apparatus and reins are secured to the head portion 22. The rider then mounts the body portion and switches on the apparatus using the adjustable control 100. This causes the actuation of the motor 78, which causes the output shaft 82 to rotate, thereby producing a generally orbital motion of the body portion at its rear end. However, in view of the connecting rod 92 pivotally mounted to the base and the body portion in front of the motor, the front portion of the body portion 12 tends to swing between the two positions illustrated in chain dot in FIG. 2. The overall movement induced by the motor is very similar to that of a real horse. In particular, it will be noted that the loci of the two points A and B in FIG. 1 are as illustrated, and are very similar to the corresponding loci on a real horse. Column 5, lines 50 -65. Nothing in this passage discloses the elements of the claims in question.

Claims 18 and 19 depend from claim 17 and therefore have the same innovative element, a pivoting body portion 44. Column 4, lines 3-16 of the Greenwood '515 patent disclose: It will also be noted that the neck portion 20 is biased into its uppermost position, as illustrated in full lines in FIGS. 1 and 2, by means of a spring-loaded arrangement. The arrangement comprises a metal cable 50 which extends from and is secured to a loop 52 on the main linkage member 26 of the neck. The cable 50 passes over two pulleys 54, 56 mounted within the body portion 12 on a further, lateral, reinforcing bar 55 and on the vertical member 42 respectively, such that the cable is thereby generally horizontal, and the cable is connected to first and second spring

arrangements 58, 60 connected in series, one end of the spring 60 also being connected to a hook means 62 secured to the intermediate frame portion 44. The cable arrangement thus also tends to pull the neck sideways if it is slightly displaced from its central position, as the cable is attached to the neck in front of the pivotal mounting of the neck. In contrast, applicant's claims 18 and 19 disclose a biasing means for biasing the body portion, not the neck portion as described by Greenwood.

Therefore, Examiner's rejection of claims 17-19 under 35 U.S.C. 102 (b) is not appropriate because Greenwood, '515, neither expressly nor inherently discloses every element of the claims in question. The present invention as defined in claims 17-19 is patentably distinguished over Greenwood. Applicant respectfully requests the Examiner to withdraw his rejection of claims 17-19 under 35 U.S.C. §102(b).

#### **Rejection of Claims 24 and 26 - 31**

Claims 24 and 26 - 31 were rejected under 35 U.S.C. 102(b) as being anticipated by Yamaguchi et al (U.S. Patent No. 4,988,300). Yamaguchi neither expressly nor inherently contains, within its four corners, every element of the claims in question.

Ymaguchi discloses a riding simulator comprising:

1. an artificial horse body
2. first and second horse body supporting structures
3. driving devices for driving the horse body supporting structures;
4. phase adjusting devices;
5. drive force transmitting mechanisms
6. control units for supplying drive power;
7. means for setting modes for stepping motions.

Yamaguchi does not disclose a polo training apparatus having  
at least one ball receiving surface; or

a device with a pivotal motion pivoting the body portion from side to side,  
sensor devices as the present invention.

The Examiner states: Regarding claim 24, Yamaguchi et al discloses a horse riding training apparatus comprising a movable body portion (2c) upon which a rider sits (1), a movable neck portion (2e) and a movable head (2d) extending from the neck portion, and a means for displacing the body portion in both a reciprocating motion and a pivotal motion pivoting the body portion from side to side (see figures 7 and 8), the apparatus further comprising sensor means (see figure 17) responsive to a simulated riding action in order to control the apparatus.

The Yamaguchi device is an artificial horse body that can closely simulate the basic stepping actions of a real horse. The Yamaguchi device does not describe a means for displacing the body portion in both a reciprocating motion and a pivotal motion pivoting the body portion from side to side as does the Applicant's. Figure 8 in Yamaguchi shows the body or barrel of the trainer inclined. This incline, or mechanical distortion is caused by the up or down movement of the legs of the trainer. The mechanical distortion is absorbed by the distortion-absorbing members 76, 78, 80 and 82, so the horse body 2 can swing smoothly. See column 8, line 63 – column 9, line 8. This is a by-product of the simulation of the stepping action, and not a claimed means for means for displacing the body portion in both a reciprocating motion and a pivotal motion pivoting the body portion from side to side as is claimed in the present invention.

As to claim 26, the Yamaguchi invention does not claim an a device with a pivotal motion pivoting the body portion from side to side, and therefore does not simulate the movements of a real polo horse during a game of polo.

As to claims 27 –28, Examiner states Yamaguchi shows one or more sensors adapted to detect pressure from one or more parts of the rider's body (see Figure 17), from one or more parts of the rider's feet (See column 3, lines 3-44). As to claim 29, the

Examiner states: Yamaguchi et al shows sensors (sensors in the form of piezoelectric elements 29a-d adapted to respond to pressure from a rider's feet (see column 13, lines 37-44), wherein actuation of the pressure sensors causes an increase in the speed of the movement of the body portion (see column 6, lines 63-68).

Actually, the sensors 29a-d are limit switches: The horse body 2 is further provided on the right and left sides of the abdomen 2b with abdomen sensors 29a, 29b, 29c and 29d in the form of limit switches. The abdomen sensors 29a, 29b, 29c and 29d correspond to the leg motion detectors 20 previously described and serve to detect aids given by the legs of the rider 1 at the heels and the insides of the knees, irrespective of the physique of the rider 1. Column 13, lines 37-44. These detectors increase the speed of the gait to a trot by moving the legs of the device. See column 6, line 63 – column 7, line 26. In contrast, in the present device, pressure sensor actuation causes an increase in the speed of movement of the body portion.

As to claim 30 and 31, for Yamaguchi control means to stop the horse body 2, the rider 1 draws the rein 33 relatively strongly. Such drawing of the rein 33 causes the rein control detectors 19 to be actuated, and a detection signal is outputted from the rein control detectors 19 to the control unit 18, which stops output of the driving command signal to the inverter 17 to stop rotation of the main motor 16. At the same time as the main motor 16 is stopped, the control unit 18 returns the phase difference and the eccentric distance E to the initial values associated with walk. Column 7, lines 35 – 44.

In contrast, in the present invention, a microswitch is activated when the rider pulls on the reins, causing the motor to slow down, but not actually stop. To stop the motor completely, repeated activation of the microswitch is required. Paragraph 0040.

Therefore, Examiner's rejection of claims 24 and 26 - 31 under 35 U.S.C. 102 (b) is not appropriate because Yamaguchi, neither expressly or inherently discloses every element of the claims in question. The present invention as defined in claims 24 and 26 - 31 is patentably distinguished over Yamaguchi. Applicant respectfully requests the Examiner to withdraw his rejection of claims 24 and 26 - 31 under 35 U.S.C. §102(b).

## **RESPONSE TO CLAIM REJECTIONS UNDER 35 U.S.C. §103**

The Examiner has rejected claim 13 under 35 §U.S.C. 103(a) as unpatentable over Maio, claim 6 as unpatentable over Collins in view of Gruttemeler (DE3704120A1), claims 17 – 19 as being anticipated by Greenwood (US Patent No. 5,429,515) and claims 20-23 as being unpatentable over Greenwood in view of Gruttemeler. Applicant respectfully traverses these objection. Applicant requests that the Examiner reconsider and withdraw the above rejection of the claims in view of the following:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

MPEP 706.02(j).

### **Rejection of Claim 13**

The Examiner rejected claim 13 under 35 USC §103 as being unpatentable over Maio. The Examiner states that, regarding claims 13, Maio does not expressly disclose the driving means, however, rotating carousels are customarily driven by electric motors, and obvious to use the same here. Contrary to Examiner's blanket statement, it is unclear why the Examiner finds obvious "to use the same here". Applicant's claim 13 depends

from claim 1 and has all of the limitations of claim 1. As is evident from the above discussion distinguishing Applicant's apparatus as claimed from the Maio device. Even if Maio carousel 24 is driven by a motor, Maio's amusement ride and game does not anticipate, suggest or make obvious, all of the elements of Applicant's invention.

Moreover, it is never appropriate to rely solely on "common knowledge" in the art without evidentiary support in the record, as the principal evidence upon which a rejection was based. *Zurko*, 258 F.3d at 1385, 59 USPQ2d at 1697. As the court held in *Zurko*, an assessment of basic knowledge and common sense that is not based on any evidence in the record lacks substantial evidence support. *Id.* at 1385, 59 USPQ2d at 1697. See also *In re Lee*, 277 F.3d 1338, 1344-45, 61 USPQ2d 1430, 1434-35 (Fed. Cir. 2002). MPEP 2144.03.

#### **Rejection of Claim 6**

The Examiner rejected claim 6 under 35 U.S.C. §103 as being unpatentable over Collins in view of Gruttemeler (DE 3704150A1). Applicant respectfully traverses this objection. Applicant requests that the Examiner reconsider and withdraw the above rejection of the claims in view of the following:

The Examiner states Gruttemeler shows a training apparatus comprising a dummy horse and at least one ball-receiving surface located adjacent to and below the dummy horse, wherein the moveable ball receiving surface comprises one run of an endless conveyor belt and it would have been obvious to include an endless conveyor belt for the ball receiving surface of Collins, to simulate the motion of the dummy horse more closely to a real horse.

In Gruttemeler, the endless conveyor belt is placed next to the simulated horse, and set at a speed of a real horse for learning how to mount a trotting horse. Page 8, lines 13 -20. The upper segment of the conveyor belt 17 lies in a plane with the upper boundary surface of platform 3. *see Gruttemeler, page 12* The GruttemelerIt conveyor

belt is for practicing mounting a running horse and is raised above the level of the surrounding area. With the Gruttemeler device, the ball would very quickly either be hit off the conveyor belt or displaced off the conveyor if the practicing player missed the ball.

It would not have been obvious to a person of ordinary skill in the art to mate this conveyor belt of Gruttemeler with the Collins device. There is no motivation or suggestion in either patent to combine these two devices. Under section 103, teachings of references can be combined only if there is some suggestion or incentive to do so. The mere fact that the art may be modified in the manner suggested by the Office Action does not make the modification obvious unless the prior art suggested the desirability of the modification. *In re Fritch*, 23 USPQ2d 1780, 1783-4 (Fed. Cir. 1992)

It is not obvious to combine these patents. The Collins patent teaches that the belt is for practising running at the side of a horse. A ball placed on the belt would either have to be hit quickly or would be displaced off the belt if missed, as there is no enclosing device for returning a ball to the belt. Balls would have to be fed by another individual to the belt if it were to be used in this way, a dangerous proposition at best.

Further, the practising device of Collins is a dish shaped surface. It would be impossible to place an endless conveyor belt whose deflection rolls are placed on horizontal bearings (Page 8, line 13-15), in other words, a flat belt, on a dish shaped surface. The intent of the present application is that a rider can practice his or her polo techniques without having to retrieve the balls which have been hit, and since the rider effectively stays in the same place because the balls are moved along the ball-receiving surface, it enables coaching to be given to the rider at the same time.

### **Rejection of Claims 20 -23**

The Examiner rejected claims 20 -23 under 35 USC §103 as being unpatentable over Greenwood in view of Gruttemeler. Applicant respectfully traverses this objection.



Applicant requests that the Examiner reconsider and withdraw the above rejection of the claims in view of the following:

**As to Claim 20:**

The Greenwood invention is in particular, although not exclusively, a jockey training apparatus. The patent discloses sensing means comprising pressure sensors sensitive to impact. *see col. 5, line 35 to col. 6, line 33*. The Greenwood sensors are designed to be hit by the whip of a rider and are for practicing the correct whipping technique, as indicated by an audible or visual signal: Moreover, the rider may also use his whip as he would do in a race ... Column 6, line 15-16. In Gruttemeler, the sensors are either triggered by a corresponding posture by the legs of the rider (sensor 9), the reins (sensor 10) or by a shift in the weight of the rider (sensor 11). Page 10, lines 5 –10. The Gruttemeler device is for a novice horse rider, one just learning to sit on and ride a horse.

It would not have been obvious to place sensors used for training basic riding technique on a training apparatus such as the Greenwood invention. The Greenwood user, such as a jockey already familiar with riding, is maintaining or honing technique on the training device as opposed to a user just learning to ride a horse.

**As to Claim 21 - 23:**

The Applicant's sensors are adapted to detect pressure from one or more of a rider's feet, knees and hand, with display means to indicate the correct posture is assumed for a particular polo shot the display means being a light. Although display means and display lights are common, a dummy horse that is movable from side to side and uses display means and lights to indicate the correct posture for a particular polo shot is unique with Applicant's invention.

Examiner's rejection of claims 20-23 under 35 USC 103 is not appropriate because neither Greenwood nor Gruttemeler suggest or teach the elements of the claims in question, nor is the subject matter of all the elements of the invention obvious in light of Greenwood or Gruttemeler. The present invention as defined in claims 20-23 is patentably distinguished over Greenwood in view of Gruttemeler. Applicant respectfully requests the Examiner to withdraw his rejection of claims 20-23 under 35 U.S.C. §103.

### **Response to Arguments Based on Greenwood**

The Examiner maintains the rejection of claims 17 –23, maintaining that, contrary to applicant's prior arguments, the body of Greenwood '515 does move from side to side, citing column 5, lines 50 – 65. These lines from Greenwood are as follows: In use, a saddle is secured to the body portion of the apparatus and reins are secured to the head portion 22. The rider then mounts the body portion and switches on the apparatus using the adjustable control 100. This causes the actuation of the motor 78, which causes the output shaft 82 to rotate, thereby producing a generally orbital motion of the body portion at its rear end. However, in view of the connecting rod 92 pivotally mounted to the base and the body portion in front of the motor, the front portion of the body portion 12 tends to swing between the two positions illustrated in chain dot in FIG. 2. The overall movement induced by the motor is very similar to that of a real horse. In particular, it will be noted that the loci of the two points A and B in FIG. 1 are as illustrated, and are very similar to the corresponding loci on a real horse.

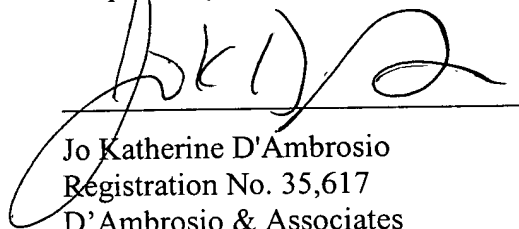
The two positions shown in Figure 2 are shown with one in front of the connecting rod, and the other behind the connecting rod, showing a back and forth motion. If the movement were from side-to-side, the dots would be parallel to the connecting rod.

## REQUESTS

Applicant respectfully requests Examiner's withdrawal of the previous rejection under 35 U.S.C. §102 and 103 and consent to allowance of Applicant's claims 1-24, and 26-31.

Applicant respectfully requests a telephone interview with Examiner to resolve any questions related to this response.

Respectfully submitted,



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10/4/04